



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

10/713,627

11/13/2003

Lawrence J. Karr

50037.0065USD3

2409

27488 7590 11/18/2008
MERCHANT & GOULD (MICROSOFT)
P.O. BOX 2903
MINNEAPOLIS, MN 55402-0903

EXAMINER

NGUYEN, DUC M

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

11/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/713,627 | Applicant(s) KARR ET AL. | |
| | Examiner DUC M. NGUYEN | Art Unit 2618 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-24, 27-29 and 44-53 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-24, 27-29, 44-53 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This action is in response to applicant's response filed on 9/19/08. Claims **20-24, 27-29, 44-53** are now pending in the present application.

Claim Rejections - 35 USC . 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **20, 23, 25-29, 44, 48-50, 52** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Lorang et al** (US Pat No. **5,548,814**) in view of **Dorenbosch** (US **6,081,202**) and **Gaskill et al** (US **5,301,358**).

Regarding claim **44**, **Lorang** discloses a mobile device comprising:

- means for receive signals from a broadcast transmitter and from a local-cast transmitter as claimed (see Fig. 11, col. 12, lines 44-46, 64-66);
- means for transmitting information as claimed (see col. 7, lines 14-16 and col. 6, lines 14-20).

However, **Lorang** fails to teach a tuning process for the mobile paging device in response to a receive command that describes a receive frequency, antenna tuning parameter and a duration of capture time from a controller. However, **Dorenbosch**

Art Unit: 2618

teaches a method for a pager to be tuned to a specified frequency at a predetermined scheduled time to receive a message (see Abstract, col. 3, lines 14-20, col. 8, lines 1-27). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate teaching of Dorenbosch to further modify Lorang to provide a scheduled message transmission as well, for ensuring the success of a message delivery process, for preventing wasted air time caused by retransmissions. By doing so, it is clear that the tracking information would comprise a receive frequency, a duration of capture time (see **Dorenbosch**, col. 8, lines 19-21 regarding message length which is just a variation of a duration of capture time), and the tuning command would obviously comprise antenna tuning parameters tuned to the receive frequency in the similar way as disclosed by **Gaskill** (see Abstract, Fig. 1). Therefore, the claimed limitations are made obvious by **Lorang** in view of **Dorenbosch** and **Gaskill** for tuning the receiver in response to the receipt of a scheduled message transmission.

As to the newly added limitation regarding the frequency of the broadcast mode differs from the transmit frequency of the localcast mode, it is noted that **Lorang** further teaches such newly added limitation (see Fig. 2 and col. 6, lines 14-20 regarding transmitter 64 and receiver 12 operating on separate frequencies), in order for the mobile device to avoid being swamped by the broadcasting station.

Regarding claim **48**, **Lorang** further discloses the device is configured to transmit information in localcast mode (see col. 12, lines 44-46, 64-66).

Regarding claim **49**, **Lorang** further discloses the device is configured to transmit information to another mobile over a localcast link (see col. 7, lines 14-16 and col. 12, lines 64-66).

Regarding claim **50**, **Lorang** further discloses an antenna assembly, a transceiver and a microcomputer assembly as claimed (see Fig. 2 and col. 5, line 50 – col. 6, line 21) and a digital processing circuit (see refs. 354, 356, 374 in Fig. 10);

Regarding claim **52**, it is clear that Larang would disclose a digital signal processor which is arranged to perform control, scheduling and post-processing task as claimed (see Fig. 10 and col. 11, line 42 – col. 12, line 15).

Regarding claim **52**, it is clear that Larang would disclose a transceiver as claimed (see Fig. 10).

Regarding claim **20**, **Lorang** further discloses a mobile device, comprising:

- an antenna (see ref. 14 in Fig. 10);
- a real-time component comprising a system timing function (see Fig. 10 regarding frequency synthesizer and a crystal 334 which inherently comprises a system timing signal), a real-time event dispatching (see col. 11, lines 42-46), and a digital radio (see RF front end regarding filters, mixers in Fig. 10);
- a digital processing circuit (see refs. 354, 356, 374 in Fig. 10);
- a microcomputer assembly (see Figs. 2, 10, and col. 5, lines 50-60);
- a random access memory (see Fig. 2 and col. 5, lines 60-col. 6, line 4);
- a nonvolatile memory (see Fig. 2 and col. 5, lines 60-col. 6, line 4); and
- a microprocessor-controlled user interface (see ref. 364 in Fig. 10).

Art Unit: 2618

Regarding claim **23**, **Lorang** further discloses the device is configured to operate within a paging unit (see Abstract).

Regarding claim **25**, **Lorang** further discloses the device is configured to receive content from local-area transmitter and from a broadcast transmitter (see Fig. 11, col. 12, lines 42-46, 64-66).

Regarding claim **26**, **Lorang** further discloses the device comprises a transceiver (see Fig. 2).

Regarding claims **27-28**, **Lorang** further discloses the device is configured to transmit and receive information from other mobile devices (see col. 7, lines 10-16).

Regarding claim **29**, **Lorang** further discloses the device is configured to receive “local” information from other devices (see col. 7, lines 10-16).

3. Claims **21-22**, **24**, **45-47**, **51** are rejected under 35 U.S.C. 103(a) as being unpatentable by **Lorang** in view of **Dorenbosch** and **Gaskill et al**, and further in view of **Hoff** (US 5,168,271).

Regarding claim **51**, it is rejected for the same reason as set forth in claim 50 above. In addition, since **Lorang** suggests using standard paging FM architecture for communication, and since the standard paging FM architecture uses FM subcarrier signals for modulation, it is clear that **Lorang** would obviously, if not implicitly, teach FM subcarrier signals as disclosed by **Hoff** (see Fig. 10, 11), whereas when communicating in locast mode, the frequency used would be locally-unused portion of an FM band in

Art Unit: 2618

order to prevent interferences with FM subcarrier signals broadcasted in the broadcast mode.

Regarding claim **45**, it is rejected for the same reason as set forth in claim 51 above. In addition, **Hoff** discloses the transceiver is arranged to test a selected station for a main channel signal and a subcarrier signal as claimed (see col. 12, line 59 – col. 13, line 2), frequency searching.

Regarding claim **46**, it is rejected for the same reason as set forth in claim 51 above. In addition, it is clear that **Lorang** as modified would disclose the transceiver is arranged to capture a packet from the acquired subcarrier signal as claimed (see **Hoff**, Fig. 10).

Regarding claim **47**, it is rejected for the same reason as set forth in claim 51 above. In addition, since **Hoff** discloses a signal level detector, Hoff would disclose means for receiving a signal is further arranged to detect loss of a signal and signal quality as claimed (see col. 8, lines 1-8).

Regarding claim **21**, it is rejected for the same reason as set forth in claim 20 above. In addition, it would have been obvious to one skilled in the art at the time the invention was made to configure the device to be worn on a person's wrist as disclosed by **Hoff** (see Fig. 1A), for preventing the displacing of the device.

Regarding claim **22**, it is rejected for the same reason as set forth in claim 20 above. In addition, it would have been obvious to one skilled in the art at the time the invention was made to configure the device to display current time as disclosed by **Hoff**

Art Unit: 2618

(see col. 7, lines 30-39), for providing current time without the need of wearing another watch.

Regarding claim **24**, it is rejected for the same reason as set forth in claim 20 above. In addition, it would have been obvious to one skilled in the art at the time the invention was made to configure the device to operate within a cellular phone as disclosed by **Hoff** (see Fig. 10), for providing voice communication without the need of carrying another device.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims **20-24, 27-29, 44-53** are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims **1-22** of U.S.

Patent No. **7,349,691** in view of **Kaiser** (US 6,060,996).

Art Unit: 2618

Regarding claims , US **7,349,691** teaches a mobile device for communicating in a localcast mode or in a broadcast mode, wherein a digital control circuit is used to generate a receive command that describes a receive frequency, antenna tuning parameters and duration of capture time to an antenna assembly for tuning the antenna in response to the receive command (see claims 1-22), which would include all the claimed limitations except for explicitly teach the frequency of the broadcast mode differs from the transmit/receive frequency of the localcast mode. However, it is noted that since claim 16 teaches that the mobile transmits in a locally-unused FM frequency, it is clear that such locally-unused FM frequency would obviously differ from the broadcast frequency, in order to reduce interference caused by the broadcast frequency or avoid being swamped by the broadcasting station in the similar way as disclosed by **Kaiser** (see col. 2, lines 33-42). Therefore, the claimed limitations are made obvious by US **7,349,691** and **Kaiser**.

Response to Arguments

6. Applicant's arguments with respect to claims 20-24, 27-29, 44-53 have been considered but are moot in view of the new ground(s) of rejection.

In response to applicant's arguments against the references individually (i.e., Dorenbosch fails to teach the frequency of the broadcast mode differs from the transmit frequency of the localcast mode), one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references.

Art Unit: 2618

See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

7. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for **formal** communications intended for entry)

(571)-273-7893 (for informal or **draft** communications).

Hand-delivered responses should be brought to Customer Service Window,
Randolph Building, 401 Dulany Street, Alexandria, VA 22314.

Any inquiry concerning this communication or communications from the examiner
should be directed to Duc M. Nguyen whose telephone number is (571) 272-7893,
Monday-Thursday (9:00 AM - 5:00 PM).

Or to Nay Muang (Supervisor) whose telephone number is (571) 272-7882.

/Duc M. Nguyen/

Primary Examiner, Art Unit 2618

Nov 14, 2008